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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,609	03/11/2005	Alastair McAlpine Marr	II/2-22748/MA 2226/PCT 5227	
³²⁴ JoAnn Villamiz	7590 12/17/200 :ar	EXAM	EXAMINER	
_	on/Patent Department	NILAND, PATRICK DENNIS		
540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			ART UNIT	PAPER NUMBER
			1796	
			MAIL DATE	DELIVERY MODE
			12/17/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/527,609	MARR ET AL.				
Office Action Summary	Examiner	Art Unit				
	Patrick D. Niland	1796				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 17 Oc	ctober 2008 and 10 November 20	008.				
	action is non-final.	- <u></u> -				
<i>,</i> —	,					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1,4,9-11,13 and 14</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1, 4, 9-11, and 13-14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage 						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	·					
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) U Other:						

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/10/08 has been entered.

The amendment of 10/1708 and 11/10/08 has been entered. Claims 1, 4, 9-11, and 13-14 are pending.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 3. Claims 1, 4, 9-11, and 13-14 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the disclosed "rosin-modified phenolic resin", does not reasonably provide enablement for all of the "rosin-modified phenolic resins" encompassed by the instant claims. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.
- A. The instant claims recite "rosin-modified phenolic resin" without specifying the modifications. Therefore the claims encompass all possible "rosin-modified phenolic resins". The instantly claimed "rosin-modified phenolic resin" reads on an infinite number of compounds resulting from the potentially infinite number of modifications which can be performed on the recited compounds. In re Wands has 8 criteria, (MPEP 2164.01(a)), as shown below.

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(A)The breadth of the claims;

(B) The nature of the invention;

(C) The state of the prior art;

(D)The level of one of ordinary skill;

(E)The level of predictability in the art;

(F)The amount of direction provided by the inventor;

(G)The existence of working examples; and

(H)The quantity of experimentation needed to make or use the invention based on the

content of the disclosure.

It is noted that the instant claims read on all potential mofications of the recited compounds which encompasses an infinite number of "rosin-modified phenolic resin" (Wands factor A). The specification does not describe how to make all such "rosin-modified phenolic resin", how to add them to the claimed compounds, nor how to select those "rosin-modified phenolic resins" from the infinite list thereof which will function as required in the instant invention (Wands factors F, G). It would require an infinite amount of experimentation to determine how to make all of the "rosin-modified phenolic resins" encompassed by the instant claims and another infinite amount of experimentation to determine which of these modified compounds would function in the instantly claimed invention as required (Wands factor H). Chemistry is an unpredictable art (Wands factor E). The ordinary skilled artisan has not imagined nor figured out how to make all of the substitutions "rosin-modified phenolic resins" encompassed by the instant claim of "modified" yet (Wands factors C, D, E, F, G, and H). The enabling

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disclosure is not commensurate with the full scope of the claimed "rosin-modified phenolic resin".

See Sitrick v Dreamworks, LLC (Fed Cir, 2007-1174, 2/1/2008), particularly

"Before MICHEL, <u>Chief Judge</u>, RADER and MOORE, <u>Circuit Judges</u>. MOORE, <u>Circuit Judge</u>.

112(1) Enablement - The enablement requirement is satisfied when one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation

We review the grant of summary judgment <u>de novo</u>. <u>LiebeI-Flarsheim Co. v. Medrad, Inc.</u>, 481 F.3d 1371, 1377 (Fed. Cir. 2007). Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(c). Whether a claim satisfies the enablement requirement of 35 U.S.C. § 112, ¶ 1 is a question of law, reviewed <u>de novo</u>, based on underlying facts, which are reviewed for clear error. <u>AK Steel Corp. v. Sollac</u>, 344 F.3d 1234, 1238-39 (Fed. Cir. 2003). The evidentiary burden to show facts supporting a conclusion of invalidity is one of clear and convincing evidence because a patent is presumed valid. <u>Id.</u> The "enablement requirement is satisfied when one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation." <u>Id.</u> at 1244.

112(1) Enablement - The full scope of the claimed invention must be enabled. A patentee who chooses broad claim language must make sure the broad claims are fully enabled.

The full scope of the claimed invention must be enabled. See Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc., 501 F.3d 1274, 1285 (Fed. Cir. 2007). The rationale for this statutory requirement is straightforward. Enabling the full scope of each claim is "part of the quid pro quo of the patent bargain." AK Steel, 344 F.3d at 1244. A patentee who chooses broad claim language must make sure the broad claims are fully enabled. "The scope of the claims must be less than or equal to the scope of the enablement" to "ensure[] that the public knowledge is enriched by the patent specification to a degree at least commensurate with the scope of the claims." Nat'l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc., 166 F.3d 1190, 1195-96 (Fed. Cir. 1999)."

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The articles cited by the applicant regarding "rosin-modified phenolic resin" are not subject to the above statutory requirements and do not cure the issue at the heart of this rejection that is stated above.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 5. Claims 1, 4, 9-11, and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- A. It is unclear what is intended by "rosin-modified phenolic resin". It is particularly unclear what modification is required. It is unclear if a mixture or reaction product is required by "modification". The articles cited by the applicant regarding "rosin-modified phenolic resin" are not subject to the above statutory requirements and do not cure the issue at the heart of this rejection that is stated above. It remains unclear what the scope of the claimed "modification" is and what particularly and distinctly is intended by "modified".
- B. It is unclear what the percentage of the instant claim 10 is based on, e.g. weight, volume, some other basis, the entire composition, or some portion thereof.
- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 4, 9-11, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 6099631 Tregub et al..

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Tregub discloses a pigment composition comprising the instantly claimed amounts of organic pigment, hyperdispersant, including the applicant's Solsperse hyperdispersants, synergist, including the applicant's Solsperse synergists, and solvent at column 1, lines 10-21, which falls within the scope of the instant claims, column 2, lines 53-67; column 3, lines 1-67, particularly 17-36 of which 31-32 has the amount of pigment of the instant claims and falls within the scope of the instantly claimed component a and its amount, lines 32-36, which is the instantly claimed component b, lines 50-51, which is the instantly claimed amount of component d, lines 37-51 of which "oil" is taken as indicating higher molecular weight fractions and therefore the instantly claimed boiling points, with any extra fractions being encompassed by "comprising" and the vegetable oils containing triglycerides naturally with any extra fractions being encompassed by "comprising" thereby meeting the instantly claimed component d and its amount, particularly considering the definition of "about" at the patentee's lower limit, and lines 62-67, which is the instantly claimed amount of component b and its amount; column 4, lines 1-19, particularly 2-4, lines 13-19, which encompasses the instantly claimed amounts of component c given that the endpoint of 4:1 corresponds to 1.5% of synergist where 6% of dispersant is used, which falls within the scope of the instantly claimed 2% within the decimal accuracy of the instant claims, and the remainder of the document and lines 64 which discloses the instantly claimed rosin esters of the instantly claimed component e; column 5, lines 1-67, particularly 5-6, 14, and 61, of which the amounts of resin, e.g. rosin ester, falls within the scope of the instantly claimed amount of component e. The Solsperse hyperdispersants of the patentee appear to be those of the instantly claimed component b based on the applicants description thereof and use of Solsperse 13000 at page 11 of the instant specification. The Solsperse synergists appear to be those of the instant

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claims based on the applicant's description thereof at page 11 of the instant specification. The above composition falls within the scope of the instant claim 9, of which "printing ink for lithographic printing" is not seen as not encompassing the above discussed pigment compositions since these claims do not require further ingredients and "printing ink for lithographic printing" is not seen as requiring further ingredients necessarily and inherently. The patentee disperses the pigment composition into components in the instantly claimed amounts of claims 10-12 and the resulting compositions appear to be useful in lithographic printing when melted. See column 4, lines 25-33 and 47-67. Column 5, lines 46-51 falls within the scope of the amount of wax of the instant claim 9. Column 3, lines 4-13 falls within the scope of the pasticizer and amount of the instant claim 9.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the above discussed combinations of materials and amounts thereof in the compositions of Tregub because they are encompassed by the patentee and would have been expected to give the benefits of the pigment compositions discussed throughout Tregub.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the above discussed combinations of materials and amounts thereof in the compositions of Tregub, including the instantly claimed amount of component c, because they are encompassed by the patentee and would have been expected to give the benefits of the pigment compositions discussed throughout Tregub and the amount of the instantly claimed component c is very close to that encompassed by the patentee, e.g. 1.5% verses 25, such that the small difference would have been expected to give similar results where the instantly claimed amount of component c is used in the compositions of the patentee and the ratio of 4:1 of the

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patentee is a preferred amount such that the patentee encompasses amounts outside the preferred amounts of column 4, lines 9-14 and the patentee states that the amount of the instantly claimed component c should be determined experimentally at this section such that it is within the ability of the ordinary skilled artisan to determine the amounts and properties desired and thereby use the instantly claimed amounts of component c where its properties are desired by the end-user. The applicant has demonstrated no unexpected results in a manner commensurate in scope with the instant claims and the cited prior art for the instantly claimed amounts of ingredients relative to the amounts of the patentee. It is expected that the instantly claimed amounts would give results predictable to the ordinary skilled artisan who has observed the compositions of the patentee firsthand, i.e. viewed them, since the instantly claimed amounts are so close to those of the reference. See MPEP 2144.05 [R-5] Obviousness of Ranges. Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties.

Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the instantly claimed rosin esters of the instant claim 14 as the rosin ester of the patentee because they are encompassed by the patentee's recitation of rosin ester, the applicant states that they are well known for use in inks at page 5, lines 18-25, and their well known properties from their well known use, observed by those of ordinary skill in the art who actually used them, would have been expected in the inks of the patentee.

Arguments limited to the patentee's examples or referencing what was done only in the patentee's examples are not commensurate in scope with the full teachings of the patentee.

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maintained.

Arguments relating to the alleged excellent results are not commensurate in scope with the instant claims and the cited prior art, particularly regarding all of the amounts, ingredient parameters, and other composition limitations encompassed by the cited prior art and the instant claims. There is therefore no showing of unexpected results which is commensurate in scope with the instant claims and the cited prior art. Arguments relating to the patentee's hot-melt solid inks are not commensurate in scope with the instant claims and the cited prior art. Note the wax of the instant claim 9 and "comprising" of the other claims. There is also no exclusion of such solid inks in the instant claims. They are therefore taken as encompassing these inks. The patentee gives rationale for using the various components disclosed therein throughout the document, e.g. in the cited sections noted above and column 1, lines 7-32, 48-50, and 63-67; column 2, lines 63-67, with "synergist" being its own rationale by definition of "synergist"; column 7, lines 1-15, and the remainder of the document. The applicant's arguments have been fully considered but are not persuasive for the above reasons. This rejection is therefore

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Patrick D Niland/ Primary Examiner Art Unit 1796